



- Board of Directors  
*Water Planning and Stewardship Committee*

11/9/2010 Board Meeting

9-1

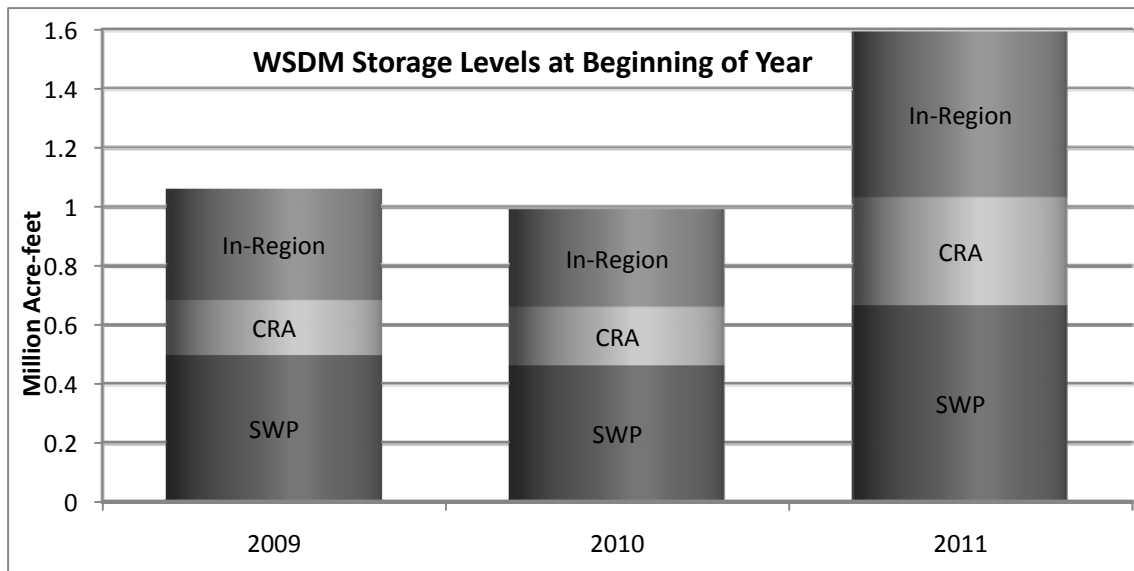
## Subject

Calendar year 2010 summary and 2011 outlook on water supply and storage conditions for Metropolitan

## Summary

As 2010 draws to a close the outlook for the upcoming calendar year is improving. Metropolitan's regional storage<sup>1</sup> is showing a significant recovery. Current estimates show that water in the dry-year WSDM storage portfolio will be about 1.6 million acre-feet (MAF) by the beginning of calendar year 2011. This is an increase of 600 thousand acre-feet (TAF) from January 2010 levels, and restores storage to levels, prior to the first Water Supply Allocation Plan (WSAP) implementation. The graph below shows storage levels at the beginning of 2009 (before the WSAP was implemented), 2010, and anticipated storage levels for the beginning of 2011.

Improved levels in both regional storage and State Water Project (SWP) facilities significantly reduce the need to implement a WSAP for the remainder of fiscal year (FY) 2010/11 or FY 2011/12. Staff analysis shows that dry-year WSDM storage levels above 1.0 MAF put Metropolitan in a good position to respond to various conditions,



including dry and critically dry, in the coming year. The projected dry-year storage level of 1.6 MAF is significantly above this range. It is highly unlikely that storage withdrawals next year would require a WSAP implementation in 2011/12. With a low chance of needing to continue a WSAP next year, it is also prudent to consider the regional benefits that could result from lifting the current FY 2010/11 WSAP.

<sup>1</sup> For the purpose of this Board information letter, "storage" refers to water stored for dry-year use (a.k.a. Water Surplus and Drought Management Plan (WSDM) storage), and does not include emergency storage reserves.

## Detailed Report

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Calendar year (CY) 2010 presented a challenge for balancing supplies and demands. The year started with the region already in a WSAP Level 2 as a result of continuous years of storage withdrawals and low SWP supplies due to the drought and regulatory restrictions. The initial SWP Table A allocation for the year was a record low 5 percent. Projections from the Department of Water Resources for increases were pessimistic even in the face of improving precipitation and snowpack and there was significant concern about ongoing imported supply challenges and further storage impacts when the Board considered the April decision to continue the WSAP in FY 2010/11.

### Key 2010 Water Supply and Storage Outlook and Actions

**April 2010 – A Low SWP Allocation Leads to WSAP Implementation:** A Level 2 Water Supply Allocation was adopted in response to the very low Official SWP allocation in place at the time (15 percent of Table A supplies, or 287 TAF for Metropolitan). Although the SWP allocation was expected to increase, there was the potential for large storage withdrawals to meet demands. A WSAP Level 2 was recommended to reduce the probability of depleting storage reserves for a fourth year in a row. Adopting a Level 2 WSAP for FY 2010/11 struck a balance between:

- Continuing of the Level 2 WSAP already in effect in FY 2009/10;
- Augmenting supplies through the implementation of Five-Year Supply Actions; and
- Limiting the fourth year of storage withdrawals.

The Level 2 WSAP cut the forecasted withdrawal of storage for CY 2010 from about 400 TAF down to about 200 TAF.

### June 2010 – Improvements Increase the Potential to Minimize Storage Withdrawals:

Late-season increases in the Official SWP allocation occurred between April and June, with the last increases providing an allocation of 50 percent of Table A supplies (956 TAF for Metropolitan). The discussion at the Board was that adopting the Level 2 WSAP for FY 2010/11 would help manage demands and increase the possibility of adding water to storage after several years of withdrawals. Estimates showed that storage could increase by approximately 300 TAF by the end of 2010, raising dry-year storage to about 1.3 MAF.

### November 2010 – Additional Improvements and Low Demands Lead to Large Increases in Storage:

The current forecast for water in dry-year storage by the end of CY 2010 is 1.6 MAF. The increase in storage from the amount forecasted in June 2010 is the result of several factors, including:

- Member agency demand of about 1.7 MAF is far below Level 2 WSAP allocations;
- Five-Year Supply Actions available in 2010 exceeded projections. These actions included:
  - Increased water transfers through the State Water Contractors Buyer's Group;
  - Purchased water from San Bernardino Valley Municipal Water District through a coordinated operations agreement;
  - Increased water transfers from the Yuba Accord; and
  - Water transfer from San Luis Water District.
- The first ever unbalanced exchange with the Westlands Water District will enable Metropolitan to take delivery of up to 150 TAF in 2010, with the return of up to 100 TAF back to Westlands in 2011. This provides net water supply benefits of up to 50 TAF to Metropolitan, while providing water management benefits to Westlands.

**Outlook for 2011 – Very Low Likelihood of Implementing a WSAP**

**Storage:** Metropolitan storage levels are significantly improved over last year. These increases improve Metropolitan's outlook for 2011 and substantially reduce the likelihood of a WSAP for FY 2011/12. Dry-Year WSDM Storage is currently anticipated to be 1.6 MAF by the beginning of 2011, over 600 TAF higher than the beginning of 2010. This increase in storage provides Metropolitan with a greater ability to balance overall supplies and demands in 2011. Staff analysis shows that dry-year WSDM storage levels above 1.0 MAF put Metropolitan in a good position to respond to conditions in the coming year. The projected dry-year storage level of 1.6 MAF is significantly above this range.

**State Water Project:** Storage conditions on the SWP system have greatly improved. Lake Oroville has increased storage to 1.70 MAF this year from 1.26 MAF last year and San Luis Reservoir (SWP Share) has increased to 570 TAF this year from 160 TAF last year. The additional water stored on the SWP system will lead to a higher range of potential Table A allocations for 2011. In late August, DWR projected that a 2011 Table A allocation of roughly 15 to 20 percent is possible even under critically dry conditions, including continued pumping restrictions. DWR also forecasted that the Table A allocation would be 67 percent under median hydrologic conditions. Notably, these forecasts assumed a dry October through December period for 2010. Actual conditions since the August study have been significantly better than those assumptions. This means that SWP supplies are likely to exceed 25 percent of Table A for 2011, even under extremely dry conditions.

**Colorado River Aqueduct:** Metropolitan's total storage in Lake Mead, including Intentionally Created Surplus and water from the Drop 2 and Yuma Desalter Programs, is projected to increase to approximately 200 TAF by the end of the year. Although the drought on the Colorado River continues with Lake Mead system storage at a historic low, studies by the U.S. Bureau of Reclamation show that there will be no shortage declaration for 2011 and a very low chance of a shortage declaration for 2012. Even under a declaration of a shortage, California and Metropolitan would be largely protected from reductions based on water rights, and deliveries of up to 1.2 MAF in 2011 are expected.

**Demands:** Under the current WSAP Level 2, member agency demands were expected to be about 2.0 MAF without penalties for 2010. However, various factors, including extraordinary member agency conservation efforts, are contributing to low demands of about 1.7 MAF in 2010. The WSAP Level 2 allocation in effect for this time period likely contributed to this low demand, as cities and water utilities implemented drought ordinances, drought pricing, and water-use restrictions. In addition, a cool summer, higher deliveries from the Owens Valley, and the depressed economy contributed to the lower sales levels. This low demand trend will likely continue through 2011, even without the WSAP Level 2 allocation in place for the rest of FY 2010/11 or 2011/12. Without an allocation, it is possible that demand could increase due to weather conditions or additional Full-Service replenishment water purchases. Even considering these factors, demands are unlikely to exceed 2.0 MAF and could be met with imported supplies and storage.

**In-Region Groundwater Basins:** Storage levels in the Southern California groundwater basins have been drawn down. Groundwater agencies have been unable to significantly replenish their basins under the WSAP and have endured years of below-normal local hydrology. Under the WSAP agencies are unable to purchase desired quantities of water for replenishment without risk of penalties. If the WSAP were lifted, supplies could be delivered to groundwater basins at Full-Service rates to raise groundwater levels and protect the water quality of the basins.

**Interim Agricultural Water Program:** The Interim Agricultural Water Program (IAWP) has historically provided interruptible surplus water at discounted rates for agricultural users. The Board approved a five-year phaseout of the IAWP beginning in 2008 and the program will be completely phased out by January 1, 2013. Before the phase-out began, Metropolitan provided almost 150 TAF per year under the IAWP. In 2009, deliveries were just over 40 TAF. This reduction is due to agricultural users opting-out of the program and to the mandatory reductions in use from IAWP cutbacks.

In conjunction with the WSAP for FY 2010/11, deliveries to the IAWP were reduced by 25 percent in CY 2010. The WSAP, currently in place for the purpose of rebuilding storage reserves, is planned to be in effect through June 30, 2011. However, the 25 percent reduction in IAWP deliveries ends on December 31, 2010. In accordance with the WSAP, IAWP reductions will continue in 2011, at a 20 percent reduction. Removing the WSAP for FY 2010/11 would allow consideration to eliminate IAWP cutbacks and restore IAWP deliveries for 2011. Lifting the IAWP restrictions would provide benefits to agricultural users in Southern California.

**Conclusion:** The outlook for water storage and supply has greatly improved in 2010. Due to a combination of low demands and increased water supply, storage levels have exceeded expectations and have reached levels not seen in several years. As a result, there is little possibility that a WSAP will have to be implemented in FY 2011/12. Demands would be met if Metropolitan receives at least 25 percent of its SWP Table A allocation, delivers at least 1.0 MAF of supplies from the Colorado River, and implements some of the available supplemental supplies as part of the Five-Year Supply Plan. Based on projected conditions, it is highly unlikely that these minimum supplies could not be obtained.

As the Board considers action regarding FY 2011/12, lifting of the current WSAP in FY 2010/11 may be evaluated. Removing the current WSAP Level 2 will protect the region's consumers from unnecessary penalty rates, and provides a path for water management actions that will address issues in local groundwater and agricultural areas. Based on all of these considerations, Metropolitan staff will be developing a recommendation for the Board's consideration in December concerning removal of the FY 2010/11 WSAP and IAWP cutbacks with no resumption of allocation or IAWP cutbacks at any level for FY 2011/12.

## Policy

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By Minute Item 47393, dated February 12, 2008, the Board adopted the Water Supply Allocation Plan.

By Minute Item 47526, dated June 10, 2008, the Board adopted the Water Supply Alert Resolution.

By Minute Item 47672, dated October 14, 2008, the Board approved changes to the Interim Agricultural Water Program.

By Minute Item 48237, dated April 13, 2010, the Board adopted Resolution 9108 supporting implementation of a Water Supply Allocation effective July 1, 2010 through June 30, 2011.


## Fiscal Impact

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None

  
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10/28/2010  
 Date

  
 Jeffrey Nightlinger  
 General Manager

10/29/2010  
 Date